

Only a little mine is required to make a large battleship look like old junk.

The trouble with the submarine mine is that it can't tell its friends from its foes.

"Alkali Ike" is dead, but "Weary Willie" and "Meandering Mike" are still going the rounds.

The New York Herald notes that "bicycling seems to be in the ascendant again." Advertising pays.

Whatever else of Tennyson may or may not live, his phrase "the sweet girl graduate" is bound to be immortal.

The man who has an idea that anybody can manage a sailboat is getting into the accident column rather early this year.

That New York girl who hugged a man so hard that she broke one of his ribs should come west and grow up with the country.

The London Times is reported to be adopting American ideas. The next thing we know John Bull will be talking through his nose.

Baer says coal is high because the people are willing to be robbed. Baer is a good man. He wouldn't tell a lie about a thing like that.

Here's hoping that the battleship Rhode Island, launched the other day, will never meet the fate of the Hatsuse and the Petropavlovsk.

President Eliot thinks "the public school houses should be used every day of the twelve months of the year." And he might add, the churches also.

A Pittsburg man killed himself because he couldn't stand it to hear the hand organ men playing "Bedelia." Pittsburg never was much of a place for art.

The non-professional military authorities who had Japan marching all over Siberia and into Russia in less than three months are amending their guesses.

When a single pair of boll weevils propagate 134,000,000 other weevils during a single season, there isn't much to say to them on the evils of race suicide!

Do you suppose it was Uncle Russell Sage who persuaded the other Western Union directors to give up the \$5,000,000 income from the pool room service?

Even leap year is powerless to save chivalrous men from kneeling at the feet of the fair sex, for lo, the season of the Oxford and its persistently flopping ties is at hand.

The unwisdom of wearing a ring set with an oblong ruby worth \$15,000 has been demonstrated to Spencer Trask, the New York banker, who has just been robbed of one.

It is thought that the higher education for women has just about reached the limit in Boston, where the fair students are now clearing the high-jump bar at 4 feet 4 inches.

The Emperor of Korea has bounced his favorite and deprived her of political power. The reports say she has been running things for ten years. That's what she gets for growing old.

A couple just married in St. Louis are going to try to lay up a competency for the future by living on 20 cents a day for the present. They will be spared the expense of entertaining much.

A New York banker has been sent to prison for nine years for stealing \$10,000. Evidently the New York courts have outlived the idea that a man's stealings should be overlooked if he takes enough.

Prof. Starr of Chicago university says this "miserable continent is not fit for the development of the highest type of animal life." Perhaps the professor has been compelled to lay in another ton of coal.

It is stated that Charles R. Flint of New York has bought two Chilian cruisers for \$5,500,000 and is dicker for a third. For a private individual Mr. Flint seems to be pretty well fixed in point of sea power.

The Journal of the Deceased, devoted entirely to obituary notices, is the latest newspaper venture in Paris. Undoubtedly, ethical considerations will impel the doctors to try to keep their names out of the paper.

Old seadogs report that the gulf stream is running at unwonted speed. As soon as the political parties find out whether this is considered advantageous or not, they will either claim the credit or lay the blame on the other fellows.

"The best after-dinner speaker I ever heard," says Senator Depew, "was Gladstone at 80, and the next in order, in my opinion, was Simon Cameron at 90." Now, who has been so unkind as to remind our Chauncey that he was 70?

# FARM ORCHARD AND GARDEN



CONDUCTED BY  
**M. J. WRAGG**

[Mr. Wragg invites contributions of any new ideas that readers of this department may wish to present, and would be pleased to answer correspondence desiring information on subjects discussed. Address M. J. Wragg, Waukegan, Iowa.]

## HORTICULTURE IN RURAL SCHOOLS.

There has been a great deal of talk lately in regard to the teaching of agriculture and horticulture in the rural schools. Doubtless great good could be accomplished in this way if there were teachers qualified for the work. But the so-called normal schools turn out too many drilled automatons and do little in the real teaching of nature. If the country school teachers could all be given a short course in agriculture and horticulture at the state colleges of agriculture we might after a while have men and women prepared to take up the work in an elementary way in the rural schools. But as the short courses at these colleges mostly come in the winter months, when the teachers are employed, there arises a need for summer schools for this purpose. These might be made a strong force in the progress of nature teaching. With teachers enthused for the work, there would soon come some application of what they have learned in the planting and beautifying of the school grounds. There is nothing like the actual work in planting trees and flowers and caring for them to make children fond of nature and her products, and there is nothing better calculated to drive the young people from the farm than the comfortable and ugly schoolhouses and their ill-kept surroundings. Getting the young people interested in plant life will then be apt to draw them to the farmers' institutes, and the institutes will never accomplish what they should in the education of the farmer till they catch him young enough.

H. B. Gurlier of DeKalb, Illinois, recently reported at a farmers' institute that as soon as his cows were taken off of ensilage and put on spring pasture (even though the pasture was good) their milk dropped off twenty per cent. Silos which thus increase the output of a cow twenty to twenty-five per cent are too valuable to ignore. If a farmer has twenty cows the silo will give as much milk as any five of them and costs nothing to feed, for ensilage is cheaper than any other winter feed. The lesson from this is that ensilage may be fed throughout the spring if not all the year round, supplementing other feed.

## STRAWBERRY ENEMIES.

In common with all other domestic fruits the strawberry has its insect and fungus enemies, says a strawberry grower. Among the more destructive of the former are the white grubs, a name given to the larval stages of the different species of the June beetles. As these work no apparent injury until the patch is two years old, it is advisable where injury is liable to occur to plow under the patch as soon as the first crop is harvested. Other insect pests are the Strawberry Sawfly, or slug, and the Strawberry Leaf Roller. These may be controlled to a certain extent by spraying. Rust, or Strawberry Leaf Blight, as it is commonly called, is perhaps the most destructive enemy of strawberry culture. This disease if not checked, soon spreads all over the leaves and attacks the fruit stems, often completely girdling them, causing them to shrivel up, and the berries are consequently useless. Fifty per cent of the crop is often lost from this cause. The most satisfactory remedy for this evil is spraying with the Bordeaux mixture, which should be applied in July or August of the previous year and before and after blossoming of the fruiting season.

Many young men leave the country and go to town for city life, because town life is easy, or they think it is, which serves the purpose of argument. The result is that ninety per cent of them earn enough money for grub, clothes, a street car ride and an occasional seat at a cheap theater. Farm life is not over-luxurious, but it is not anywhere near so hard as it is claimed to be, and compares favorably with average city life. Successful farmers are just as numerous as successful business men.

## BREVITIES.

Plausible lies are "facts made of wax."  
Klondikers are having their golden daze.  
The silo is a cow buoy—a dairy lighthouse.  
Money breeds the moral backbone out of men.  
A concealed Christian may be guilty of idolatry.  
A dishonoring saw may raise a crop of cow peace.  
No, sir—men with a dual purpose seldom do all they should.  
Make 'em eat dirt! Who? The crops. Pulverize the soil so they can do it.

## ON CORN CULTIVATION.

How to cultivate corn to the best advantage is a question very much alive. It seems that no rule can be laid down which is best. The object of cultivation is to produce the most favorable conditions for the growth of the corn, and while the ideal condition is largely the same always, the methods of reaching it are many, and vary according to surrounding circumstances, conditions and methods of previous tillage.

The condition to be attained is to hold in the soil the fullest amount of moisture that does not retard the growth of the crop, and to keep the weeds from growing. Every farmer knows that by plowing up the weeds he destroys them and that by maintaining a surface mulch he keeps the moisture in the ground.

Knowing the object sought, every one growing corn should carefully study the conditions prevailing in his own fields, and use such methods that, in his best judgment will turn these conditions to good account. The methods that would be best adapted to one kind of soil might be the very worst for some other soil. Consequently it is not wise to adopt any method without careful consideration of its effect under the specific conditions prevailing. To read and know of different methods is advisable, if it instructs along general lines, and it is a wise farmer who does it. But it is a still wiser one who gains general knowledge and seeks to apply it to specific cases.

Study the effects of different modes of cultivation and apply the one that seems best adapted to the particular needs in the case.

"Down in the woodland pasture  
The thistles and briars grow,  
And the buttercups are yellow as gold,  
And the daisies white as snow,  
And Brindle, and Bessie, and Gray,  
When the afternoons grow late,  
Take the trodden, homeward path  
That leads to the barn-yard gate."

## POULTRY POINTERS.

Save the meat scraps for your fowls. It is a good rule to scald out the drinking vessels once a week.

Ground bone can be fed alone or in soft food.

Tobacco stems covered with straw in the nests will prevent insect breeding.

Proper food and a variety of it make strong, healthy chickens.

One disadvantage of guineas is that they are not good market fowls.

If you want to keep eggs for any length of time turn them over every day.

Clean earth is one of the best absorbents that can be used in the poultry house.

Whitewashing the nests, inside and out, is a good means of keeping them free from vermin.

Mark your chicks each year so you can know their age, and kill or sell them after the third year.

Don't forget to go to a picnic occasionally this summer; it is not time lost. Give the women and children the recreation and change which is essential to their well-being. The farmer who is so "practical" that he does not believe in recreation is practically idiotic in his blindness. He gets a fair share of change and recreation for himself in his weekly or semi-weekly trips to town where he gossips at the stores. Let him be wise enough to give his family the same amount of change from the humdrum and drudgery of the farm. He will "get more work out of them" in the course of a year and a lifetime than he ever will by holding them continually at toil.

There is time yet, but it will soon pass away, for a crop of rape. I wonder if one in ten of our readers grow rape. "What is that plant?" pointing to a rape field and saying that he had never seen or heard of it before. Rape is practically a rutabaga which grows rapidly and converts all of its nutriment into rich succulent leaves instead of storing it in the plant as does the rutabaga.

Any land that is reasonably fertile will grow rape. Oat, wheat or rye stubble can be plowed and made fine and three or four pounds of seed sowed to the acre and covered lightly and if dry weather, rolled. The rape plant don't mind what kind of weather we have. Dwarf Essex rape seed looks like rutabaga seed, not turnip seed, as does the mustard rape. Many farmers have been badly injured by getting the worse than worthless seed. Stock can be turned into it after the plants are eight or ten inches high. Even milch cows can have about two hours after they are milked to eat some.

## LAST CHANCE FOR A CROP OF RAPE.

A good dairy cow is made by intelligent breeding and feeding. She does not come by chance. It takes seven years of steady, watchful attention after birth to bring a cow to her best in the production of milk.

## CUCUMBER PESTS.

Probably no insect has withstood more methods of repression than the striped cucumber beetle. Each year some new style of plant cover, some new poison or some new foul smelling compound is pronounced by writers in the agricultural press a never failing defense; yet the little pests return to the attack every season in increasing numbers and with sharper appetite than before, says a bulletin from the New York experiment station. It may be safely said that no perfect remedy or preventive has yet been found. Only by a combination of two or more measures can we hope to keep even, or perhaps get a trifle the better of this insignificant appearing little foe. Squash is the beetle's favorite food plant, so this vegetable should be planted in single rows along the margins of small patches, or in several rows around large fields, about four days before the cucumber seed is sown. When these trap plants are up and the beetles appear about them dust about half the plants with green arsenite, reserving the other half for use if rain or heavy dew makes the poison soluble and kills the vines first treated. The beetles will feed upon the squash vines and be poisoned by the arsenite. When the cucumbers are up they should be sprayed with Bordeaux and more of the squash vines should be poisoned.

Fruit is a profitable product of the farm even if none of it is sold. The eating of it promotes health, saves doctors' bills, and saves money that would be otherwise spent for things to take its place; if there is no fruit arrange for it; if some fruit is now grown, arrange for more.

## ORCHARD NOTES.

Just how to prune a fruit tree is not easy to tell. Each tree must be pruned to suit circumstances. The principal thought must be to give it light, air, a good form, and prevent its growth so it will split apart some day. For instance, train the young tree so it will not spread its main branches at one point. "Open the top" is the cry of most pruners, and a good one. Once every year, sometimes twice, we have to tell you to wait for a good soaking rain and then throw a couple of forkfuls of straw manure around every newly planted tree on the place. Do it first chance. Don't ask why—go do it.

Old Peter Tugbaldow lets his orchard grow into a tough sod, and is surprised that his neighbor, who does not, has larger and finer fruit than he. He does not seem to know that tough sod will not do for an orchard.

When a twig of your tree appears as if covered with ashes, look sharp for San Jose scale; also, if when the bark of infected twigs is scraped an oily yellowish liquid appears on the surface.

If any fruit should be thinned it is the plum. Nature herself, recognizing that this fruit is prone to overbear, sheds some fruit in early summer. This is not enough, however, and the grower should continue the process after the June drop.

Muzzle the horse in the young orchard and tie up the single trees with fertilizer bags.

Frequent harrowing will destroy weeds by killing them while still very young and tender.

Let no grain ripen near a young tree.

The hog by reason of its peculiar makeup needs more shade than any other domestic animal. The person who neglects shade for fat hogs is liable to meet with a loss for his negligence. Hogs require a dense shade and an abundance of water with access to the breezes.

## SUMMER BEDDING.

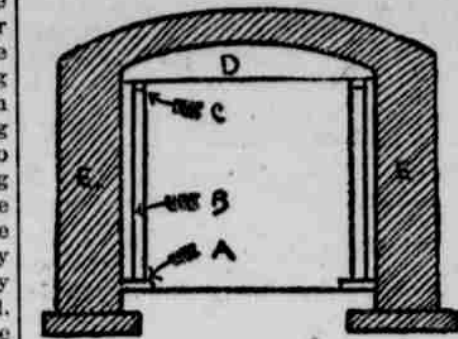
Too many farmers have an idea that little bedding is needed by either horses or cows during the summer. They take the stand that the bedding would be too warm for the animals. This is nonsense for the horse, especially, needs clean bedding during the months when it perspires freely from labor. Any material may be used for summer bedding that is used during the winter, but the bedding should be removed from the stalls each morning and any that is to be put back should be thoroughly aired. Sawdust is good for bedding and will not be injurious to the soil provided it is mixed on the compost heap with manure and a certain amount of hay or straw bedding, so that when it is applied to the soil it will not be too hard to distribute. Many farmers use weeds for summer bedding and there is no objection to this as they are not used when in seed so that when thrown on the manure pile the seeds will be kept in full germinating power to make trouble later when placed on the farm. Bed the animals as carefully and as cleanly during the summer as during the winter and they will be all the better for the good care.

## TO BUILD CONCRETE ARCH.

Strong and Lasting Structure Comparatively Inexpensive.

S. S.—Please tell me how to use concrete in building arches over streams and under main roads.

Where the span is not more than ten feet the arch can be moulded all in one. When the diameter is greater the concrete should be molded into blocks and then laid up the same as stone. If the culvert is not more than five feet wide, the arch may be put on flat, but if wider it should have a little crown. The plan shown describes the mode of building an arch. It has a 2 by 12 inch plank on the bed of the stream; on this stand 2 by 4 inch upright, which should not be



Concrete Arch Over Stream.

A, 2 by 12 in. plank; B, 2 by 4 in. uprights; C, 2 by 4 in. scantling on uprights; D, center supporting arch; E, concrete.

more than 2 1/2 feet apart; on top of this a 2 by 4 inch scantling is laid lengthways of arch; then a center cut out of the plank, or inch boards and covered with inch lumber to hold the arch. The earth should be well rammed around the wall when filling in.

## Fitting Rafters on a Barn.

E. N.—I am building a barn 80 by 22 feet, and wish to put on two sets of rafters, to meet at the perline plate. What length should the rafters be and how should they be fastened?

Each set of rafters should be 12 feet long. The lower set should project one foot over the lower plate. These should be sawed so as to sit squarely on the plate, the projecting foot to be two inches deep. The upper end of the rafter rests on the perline plate, and the lower end of the upper rafter lies beside it. The top sides of the two rafters should be flush. The upper rafter fits on the perline plate with a tongue on the lower side to drop down on the inside of the plate to form a brace. The rafters are all spiked to the plates if necessary. The lower rafters should have a 9-foot rise and the upper ones seven.

## Clearing Land of Willows.

Subscriber.—I have some water willows on my farm. I have cut them down, but they grow up again. I think they will have to be dug up. What is the best way to get rid of them?

Cutting willows down will not kill them. Osier beds can be cut for a great many years for the osiers without doing the roots any harm. The only way to get rid of willows is to root out each bush. The easiest way to do this is to hitch a chain round the bush near the bottom and then drag it out by the roots with a horse, after loosening the bush by cutting some of the main roots with an ax. Many acres have been cleared in this way in Manitoba, and it is found the most convenient way of doing the work. If the bushes are not very large the land may be burnt over and then plowed with a heavy scrub plow.

## Cement for Kitchen Walls.

I want to put up a concrete kitchen, 16 by 20 feet, and 14 feet high; the end wall will join the present building, leaving three sides to build, two sides 20 feet long, and the end wall 16 feet, with gable ends. How much gravel will be required and how much cement, the wall being six inches thick?

Your wall would require 19 barrels of natural rock cement and 15 yards of gravel, making the concrete one of cement to one of gravel; or, if Portland is used, 14 barrels would do the work, making the concrete one of cement to seven of gravel. This estimate is given on using all gravel (no stone for fillers) as the wall, being only six inches thick, very little stone can be used.

## Support for a Chimney.

A. E. B.—I wish to build a brick due 18 feet high, 30 bricks to the foot. I want it to rest on a floor having 4 by 6 inch sills, 12 feet long and 16 inches apart. If the sills rest on the 6 inch sides would they be strong enough to bear the weight?

If the chimney is built at the end of the building so that it rests on end of the joists these will provide sufficient support, but if it is built in the center of the room supports should be provided immediately underneath. If the chimney starts from the ground floor a small abutment can be built under the joints or sills, which will hold the weight.

## Setting a Cottage.

J. H. A.—In building a one-story cottage, 19 by 23 feet, with a veranda in front on level ground, how high should it be set in order to appear well from the road?

A one-story house should be set about two and one-half or three feet above the grade, if the appearance from the road is the only consideration to take into account, and assuming that the lot is level. The depth of the cellar sometimes has to do with the height from the grade. As the general thing houses of this size are set about that high.



**The Improvidents.**  
"The grocer sent his bill to-day, and what do you think he charged us for butter?"  
"How much?"  
"Twenty-eight cents a pound."  
"Good land! It's downright robbery. No wonder we're always poor. By the way, dear, I found a parrot to-day that talks in three languages. The man wants only \$10 for it."  
"What a bargain! We must have the bird, by all means."

**No Reflected Glory for Him.**  
"After all, what's the use marrying a woman who has the ability to make herself famous?"  
"Well, a wife of that kind, you know, may make herself known to posterity."  
"Nothing of the kind. Consider the case of Mme. Du Barry's husband. I'll bet \$40 that nine out of every ten people honestly believe there never was a Mr. Du Barry."



**Good Reason.**  
Grace—He says Friday is his lucky day.  
Marie—Why, do you suppose?  
Grace—Oh, I guess he was born on that day.—Philadelphia Bulletin.

**Worse Than Green Goods.**  
Uncle Wayback—I just tell you, the city is an awful place. Skin yeh alive there.

**Farmer Meadow (gloomily)—That's so.**  
Uncle Wayback—Eh? Did yeh meet some green goods men while you was in the city?  
Farmer Meadow—No-o, but my wife met some dry goods men.—New York Weekly.

**Peace to His Ashes.**  
Mrs. DeSwell—"You seem to be a great lover of the weed, Mr. Puffington. Does your father smoke as much as you do?"  
Puffington—"Well, I should hope not."  
Mrs. DeSwell—"What do you mean?"  
Puffington—"He has been dead ten years."

**It Worried Him.**  
"That land," said the city nephew, "is valued at \$800 a front foot."  
"Thunderation!" exclaimed the old farmer, hastily moving back onto the sidewalk. "An' I stood on it most five minutes! Do you reckon they'll charge me rent?"



**One Better.**  
She—What is nobler than a man you can trust?  
He—One who will trust you.

**Then They Wouldn't Have Met.**  
"Is it becoming to me?" asked she, as she paraded, in the costume of 180 years ago, before the man who is not her lord and master, but is her husband.  
"Yes, my dear," said he, meekly.  
"Don't you wish I could dress this way all the time?" she asked.  
"No, my dear," he replied; "but I wish you had lived when that was the style."

**Just a Scheme.**  
Mrs. Gaussip—I think you ought to know this, Mrs. Subbubs. Your husband kisses your cook.  
Mrs. Subbubs—Yes, I told him to do it. You see the cook thinks she is getting ahead of me in that way and so she never thinks of leaving.

**Destructive Styles in the Kitchen.**  
Lady of the House—Lorena, you break more china and glass than any cook we ever had.  
Lorena—I can't help it, ma'am; it's these big sleeves drags 'em off on the tables.